PA-306

ORDERCODE D6145

Highlite International B.V.

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The Netherlands

SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from DAP Audio.
The DAP Audio Core PA-306 brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated show, this product provides the effect you need.

You can rely on DAP Audio, for more excellent audio products.
We design and manufacture professional audio equipment for the entertainment industry.
New products are being launched regularly. We work hard to keep you, our customer, satisfied.
For more information: iwant@dap-audio.info

You can get some of the best quality, best priced products on the market from DAP Audio.
So next time, turn to DAP Audio for more great audio equipment.
Always get the best -- with DAP Audio !

Thank you!

DAP Audio PA-306™ Product Guide

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Warning

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a device must be returned to the factory, it is important that the device is returned in the original factory box and packing.

Your shipment includes:

- DAP PA-306
- power cable - 2m
- User manual

CAUTION!

Keep this system away from rain and moisture!

Safety Instructions

Every person involved with the installation, operation and maintenance of this system has to:

- be qualified
- follow the instructions of this manual

CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!

Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the system.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the system are not subject to warranty.

This system contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the system.

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never leave any cables lying around.
- Do not insert objects into air vents.

- Do not connect this system to a dimmerpack.
- Do not switch the system on and off in short intervals, as this would reduce the system's life.
- Do not open the device and do not modify the device.
- Do not drive the inputs with a signal level bigger, than required to drive the equipment to full output.
- Do not plug Mics into the console (or stagebox) while Phantom Power is on. Also mute the monitor / Pa system when turning Phantom Power on or off. Allow the system to adjust for a couple of seconds, before setting the input gains.
- Only use system indoor, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- Always disconnect power from the mains, when system is not used. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Always operate the unit with the AC ground wire connected to the electrical system ground.
- Make sure you don't use the wrong kind of cables or defective cables.
- Make sure that the signals into the mixer are balanced, otherwise hum could be created.
- Make sure you use DI boxes to balance unbalanced signals; All incoming signals should be clear.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the system and the power-cord from time to time.
- Please turn off the power switch, when changing the power cord or signal cable, or select the input mode switch.
- Extreme frequency boosts in connection with a high input signal level may lead to overdriving your equipment. Should this occur, it is necessary to reduce the input signal level by using the INPUT control.
- To emphasize a frequency range, you don't necessarily have to move its respective control upward; try lowering surrounding frequency ranges instead. This way, you avoid causing the next piece of equipment in your sound path to overdrive. You also preserve valuable dynamic reserve ("headroom")
- Avoid ground loops! Always be sure to connect the power amps and the mixing console to the same electrical circuit to ensure the same phase!
- If system is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the system has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your system. Leave the system switched off until it has reached room temperature.
- If your Dap Audio device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Dap Audio dealer for service.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- For replacement use fuses of same type and rating only.
- WARRANTY: Till one year after date of purchase.

Operating Determinations

This system is not designed for permanent operation. Consistent operation breaks will ensure that the system will serve you for a long time without defects.

If this system is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
Any other operation may lead to dangers like short-circuit, burns, electric shock, etc.

You endanger your own safety and the safety of others!

Improper installation can cause serious damage to people and property !

Connection with the mains

Connect the device to the mains with the power-plug.
Always pay attention, that the right color cable is connected to the right place.

International	EU (including UK) From April 2004	North America	Pin
L	Brown	Black	Phase
N	Blue	White	Neutral
⏚	Green/Yellow	Green	Protective Earth

Make sure that the device is always connected properly to earth!

⚠ Return Procedure ⚠

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.nl and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:
1) Your name
2) Your address
3) Your phone number
4) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.
It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.
Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.
Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.
Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

Description of the device

Features

The PA-306 is a professional 30W Public Adress amplifier with 6 inputs:

- Inputs: 3 x Mic, 3 x Line input
- Phantom power
- Front line input, 3.5mm Jack
- Pre amp output
- 4/8 Ohm & 70/100 V output
- Bass & Treble control
- DC power input
- Siren
- Priority on input 1
- Limiter protection

Frontpanel

Fig. 1

1. Mic 1 level control
Use to adjust the input volume level for the **Mic 1 (10)** input.

2. Mic 2 level control
Use to adjust the input volume level for the **Mic 1 (31)** input.

3. Mic 3 level control
Use to adjust the input volume level for the **Mic 1 (30)** input.

4. line 1 level control
Use to adjust the input volume level for the **line 1 (13)** inputs.

5. line 2 level control
Use to adjust the input volume level for the **line 2 (29)** inputs.

6. line 3 level control
Use to adjust the input volume level for the **line 3 (28)** inputs.

7. Bass control
Use to adjust the Bass frequencies to your preference.

8. Treble control
Use to adjust the treble frequencies to your preference.

9. Master control
Use to adjust the volume level for each channel to your preference.

10. Mic 1 input
Mic level balanced TRS jack input for channel 1. Accepts balanced and unbalanced inputs.

11. Priority button
Pushing this allows you to switch the PA-306 in priority mode. In priority mode, all channels except channel 1 are muted as in the (optional) microphone connected to channel 1 is picks up a sound.

12. Siren button
Pushing this button will start the siren.

13. Line 1 input
3,5mm stereo mini jack input for connecting a line level device such as an I-pod, CD player etc.

14. Clip LED
The clip LED indicates peak levels at the output of the amplifier. If the clip LED frequently blinks or lights continuously, the output is likely to enter clipping. If this happens, we strongly suggest lowering the **master (9)** control.

15. Signal LED
Indicates an audio signal is present at the output.

16. Power LED
Indicates, the device is switched on.

17. AC power switch
This is the main Power switch. Press to turn the amplifier on.

Backpanel

Fig. 2

18. AC-selector
Before connecting your PA-306 to the mains, make sure the AC-selector is set to the proper voltage used in your country. If you're not sure, consult a skilled technician.

19. DC 12V 5A terminal
DC 12V input (battery)

20. Common speaker terminal
Connect this terminal with the – terminal of your low speaker(s).

21. 8 Ω terminal
Connect this terminal to the + terminal of your 8 Ω speaker(s). In case of using several speakers.
Make sure that the total speaker load is 8 Ω. The total power rating of the low impedance speakers connected to this terminal summed, should be at least 30W.

22. 100V terminal
Connect this terminal to the + terminal of your 100V speaker(s). In case of using several speakers make sure all speakers are wired in parallel.
The total power rating of the 100V-speakers connected to this terminal summed, should never exceed 30W.

23. AC Inlet with integrated fuse holder
This connector is meant for the connection of the supplied main cord. Connect one end of the power cord to the connector, the other end to the mains, then turn on the **power (14)** switch to operate the unit.
Make sure that the supply voltage matches the operation voltage before connecting the unit to mains. Replace the fuse only with a fuse of the same specification (230V:T800mA, 115V:T1,6A).

24. GND Screw
This screw offers a separate ground connection. Can be useful in case of grounding problems.

25. 4 Ω terminal
Connect this terminal to the + terminal of your 4 Ω speaker(s). In case of using several speakers.
Make sure that the total speaker load is 4 Ω. The total power rating of the low impedance speakers connected to this terminal summed, should be at least 30W.

26. 70V terminal
Connect this terminal to the + terminal of your 70V speaker(s). In case of using several speakers make sure all speakers are wired in parallel.
The total power rating of the 70V-speakers connected to this terminal summed, should never exceed 30W.

27. Line out
RCA stereo line lvel output for connecting a recording device or an additional amplifier.

28. Line 3 input
RCA stereo input for connecting a line level device such as an I-pod, CD player etc.

29. Line 2 input
RCA stereo input for connecting a line level device such as an I-pod, CD player etc.

30. Mic 3 input
Mic level XLR input for channel 3. Accepts balanced and unbalanced inputs.

31. Mic 2 input
Mic level XLR input for channel 2. Accepts balanced and unbalanced inputs.

Operation

Installation

Remove all packing materials from the PA-306. Check that all foam and plastic padding is removed. Secure the equipment into a 19" rack. Connect all cables.

Set Up and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 115V specification product on 230V power, or vice versa.

Before powering up the first time, make sure the AC-selector switch is set to the proper voltage.

Damage caused by connecting the amplifier to improper AC voltage is not covered by any warranty.

NOTE: Always turn off and disconnect the amplifier from mains voltage before making audio connections. Also, as an extra precaution, have the attenuators turned down during power-up.

Connecting Inputs

Use the XLR input connectors on the rear to supply audio signals to your DAP Audio PA-Series amplifier. The connectors accept balanced and unbalanced audio connections. (The PA- Series amplifiers are configured standard with "Pin 2 hot" on XLR inputs. For more Information, see the section on Connection cables on page 10.

Connecting Outputs.

Speakers are connected using terminal connectors. See the examples below and following page.

Low impedance outputs

You can use as many speakers as you want, as long as the total impedance matches the amplifiers output.

Example 1: using the 4Ω output with two 8Ω speakers.

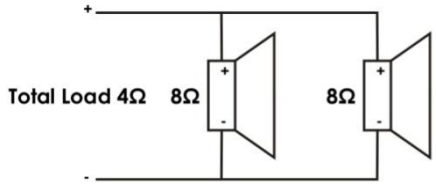


Fig. 3

Example 2: using the 4Ω output with four 4Ω speakers

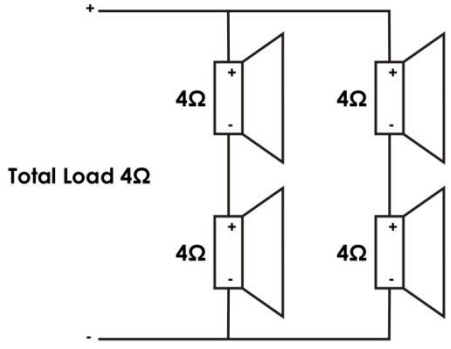


Fig. 4

Example 3: using the 8Ω output with two 4Ω speakers.

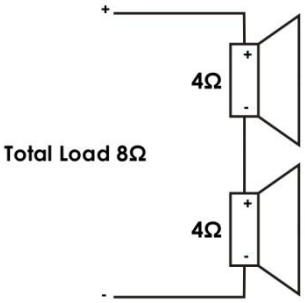


Fig. 5

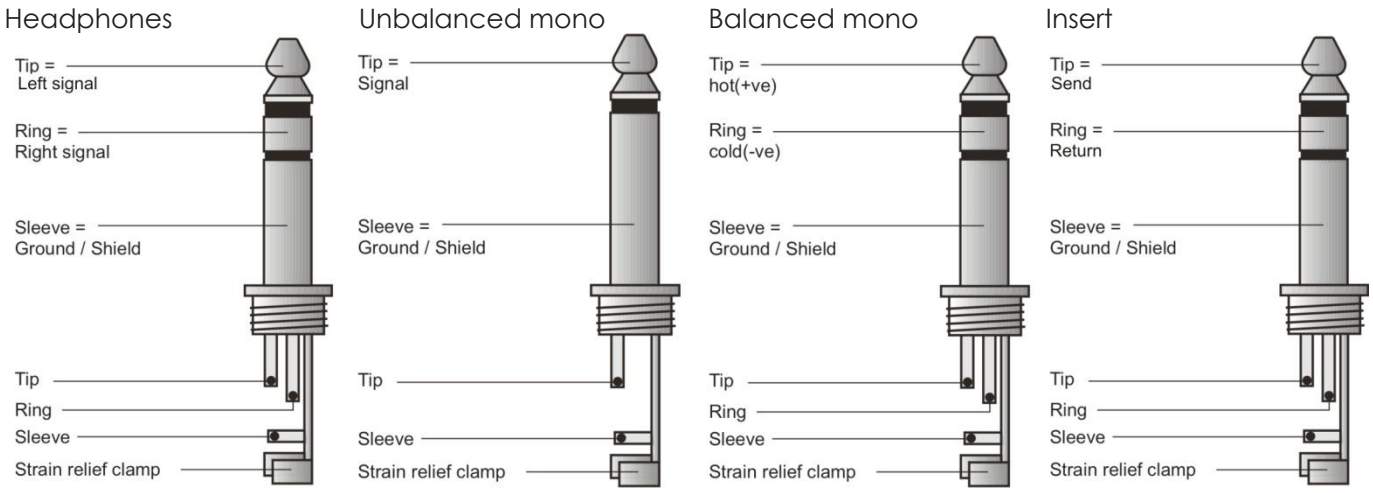
In a low impedance system, the total speakerload should always match the amplifier impedance This to avoid overloading the amplifier. The total speaker power should be at least the power of the amplifier to avoid damage to the speakers.

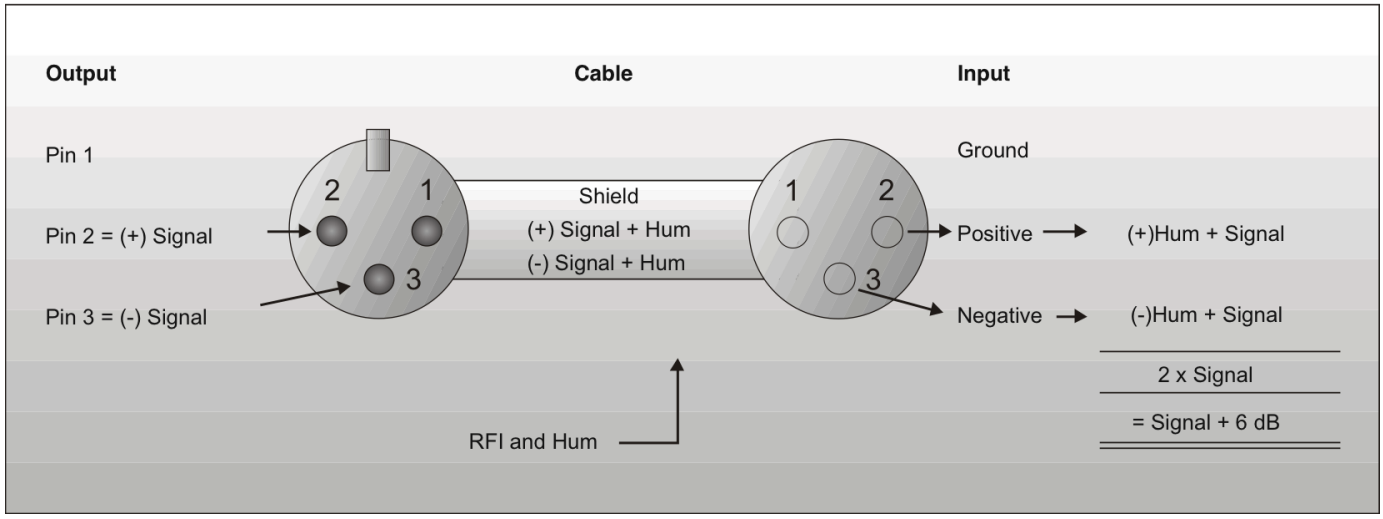
High impedance outputs
If using either the 70V outputs or the 100V outputs, note that all speakers should be wired in parallel.

The total power of all speakers summed together should never exceed the total power of the amplifier in a high impedance (70V or 100V) system!

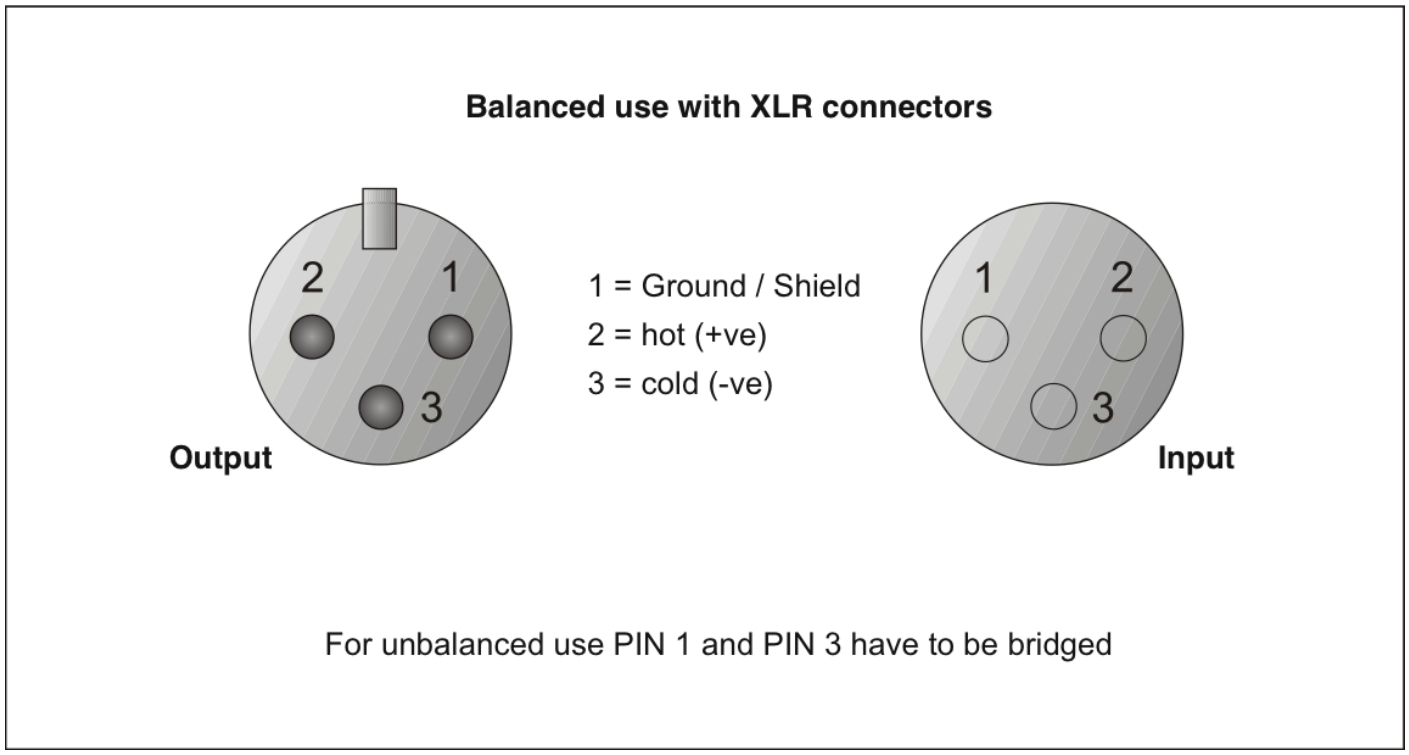
Connection Cables

Take care of your cables, always holding them by the connectors and avoiding knots and twists when coiling them: This gives the advantage of increasing their life and reliability.
Periodically check your cables. A great number of problems (faulty contacts, ground hum, discharges, etc.) are caused entirely by using unsuitable or faulty cables.





Compensation of interference with balanced connections



Maintenance

The DAP Audio Core PA-306 requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents.
Keep connections clean. Disconnect electric power, and then wipe the audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

Troubleshooting

DAP Audio Core PA-306
This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

1. If the device does not operate properly, unplug the device.
2. Check power from the wall, all cables, connections, etc.
3. If all of the above appears to be O.K., plug the unit in again.
4. If nothing happens after 30 seconds, unplug the device.
5. Return the device to your DAP Audio dealer.

Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

1. Unplug the unit from electric power source.
2. Insert a flat-head screwdriver into a slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
3. Remove the broken fuse. If brown or unclear, it is burned out.
4. Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Product Specifications

Output power:	30W
Power outputs:	4 Ohm, 8 Ohm, 70V, 100V (terminal strip)
Record output:	RCA
Mic 1:	6,3mm Jack, front panel
Mic 2:	XLR, backside
Mic 3:	XLR, backside
Input 1:	3,5mm Jack, front panel
Input 2:	RCA, backside
Input 3:	RCA, backside
Indication LEDs:	Signal, clip, power
Tone control:	Bass 100 Hz, treble 10 KHz, +/-12dB
Priority:	Input 1 (switch)
Main power supply:	230/115Vac, 50/60Hz
Back-up power supply:	DC 12V 5A, terminal strip
Fuse:	230V:T800mA, 115V:T1,6A
Power connection:	IEC
Dimensions:	280 x 220 x 85mm (WxDxH)
Weight:	5 kg
Accesoires:	19" Rack mounts

Design and product specifications are subject to change without prior notice.

CE

Website: www.Dap-audio.info
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